

Claim Amendments

1) (Currently Amended) A method of changing-over between a first molten aluminum-zinc alloying metal coating composition bath to and a second molten zinc coating composition bath in a metal strip coating line, which line comprising comprises an insulated first tank provided with heating means for controlling the temperature of the molten metal bath in said first tank during coating of said strip and an uninsulated second smaller removable tank for containing said second coating molten coating metal bath adapted to be partially immersed within, and receive heat with good transfer primarily from, the molten metal bath within said first tank, which method comprises:

to switch from coating said strip with the molten bath in said first tank to coating said strip with the molten bath in said second tank by :

withdrawing a first amount of said first coating ~~composition bath~~ so that the volume emptied from said first tank is sufficient ultimately to accommodate the second tank;

modifying the composition of the molten bath in said first tank from the normal coating composition by the addition of zinc thereby to reduce the relative corrosiveness of the first bath and also to modify so that the melting temperature of the resulting interim molten bath in said first tank is to below the operating temperature of the coating molten coating metal bath in said second tank;

placing said second tank within said first tank largely immersed in good heat-transfer contact with the interim first coating molten metal in said first tank;

filling said second tank with to complete the second coating molten coating bath metal;

controlling the temperature of the second ~~coating molten coating bath metal~~ by controlling the heating means of said first tank.

2) (Currently Amended) A method according to claim 1, further comprising maintaining the upper level of the second ~~coating molten coating bath metal~~ in said second tank at about the same upper level of the first ~~coating molten metal coating bath~~ in said first tank.

3) (Currently Amended) A method according to claim 2, wherein the first coating bath has a composition of a molten metal comprising about 50% to 60% by weight of aluminum, about 40% to 50% by weight of zinc and about 1% to 2% of silicon, and wherein the second coating bath has a composition of a molten ~~second metal~~ comprising more than about 98% of zinc by weight and less than 1% of aluminum and antimony.

- 4) (Currently Amended) A method according to claim 3, wherein said modifying step is accomplished by adding molten zinc, as at least the major constituent, to the first coating ~~composition bath~~ remaining in the first tank after the withdrawal of said first amount thereof, such that the concentration of aluminum in the first tank is lowered from about 55% to about 10% in order to effectively lower the solidification temperature of the resulting interim molten bath in the first tank for it to be molten while the galvanizing second bath is in use.
- 5) (Currently Amended) A method according to claim 4, wherein the composition of said interim modified molten metal bath in said first tank is modified to have a density in the range of 5.5 to 6.0 tons/m³ and a melting temperature of about 400°C to about 480°C.
- 6) (Original) A method according to claim 5, further comprising preheating in a furnace said second tank to a temperature above about 400°C.
- 7) (Currently Amended) A method according to claim 6, further comprising withdrawing from the surface of the molten bath of said first tank, iron compounds, dross, which tends to float when increasing the density of the first bath by adding zinc.
- 8) (Currently Amended) A method according to claim 7, further comprising coating the external side of the wall of said second tank with a zirconium-based coating for protecting it against the chemical action of the interim molten metal bath in said first tank.
- 9) (Currently Amended) A method according to claim 1, further comprising providing heat to any exposed portion of the ceramic lining of said first tank during the withdrawal step, by means of burners so as to avoid thermal shocks to said ceramic lining.
- 10) (Currently Amended) A method according to claim 1, further comprising the following steps for returning to the operation of coating said strip with said first coating molten metal bath by:
- withdrawing the molten metal from said second tank;
 - removing said second tank away from said first tank; and
 - adjusting the volume and composition of the interim molten metal bath in said first tank back to a aluminum-zinc alloying metal coating bath by additions inclusive of silicon and liquid aluminum.

Claims 11-15 (Withdrawn)